CASE PRESENTATION

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POST GRADUATE FINAL YEAR
DEPT OF GENERAL MEDICINE
26-06-2014

CASE 1

A 42 year old female patient presented with

- h/o trauma 2 days back f/b
- Chest pain
- shortness of breath

HOPI

- Pt was apparently alright 2 days back then she sustained injury (fall from bike)
- Later patient developed chest discomfort in the form of heaviness in the chest, sudden onset, gradually progressed, no aggravating and relieving factors
- Associated with shortness of breath, sudden onset, gradually progressive, gradeI-II (NYHA grading)
- No h/o PND, orthopnea, palpitations, syncopal attacks
- No swelling of feet or reduced urine output

- Past history:
  - not a known case of DM, HTN, CAD, BA, epilepsy
- Personal history:
  - Takes mixed diet
  - Appetite normal
  - Bowel and bladder habits-regular
  - Sleep adequate
  - No addictions

- Family history:
  - Not significant
- Treatment history:
  - No h/o usage of any drugs

GENERAL PHYSICAL EXAMINATION

- Pt is moderately built and nourished
- conscious and coherent
- No Pallor, Icterus, Cyanosis, Clubbing, Pedal edema, Generalized lymphadenopathy, Koilonychia
- JVP : Normal
- Temp : afebrile
- PR : 100bpm, regular, normal volume , no radio-radial delay, no radio-femoral delay, all peripheral pulses are felt.
- BP : 11O/70 in left arm supine position
- RR : 22cpm thoraco-abdominal.

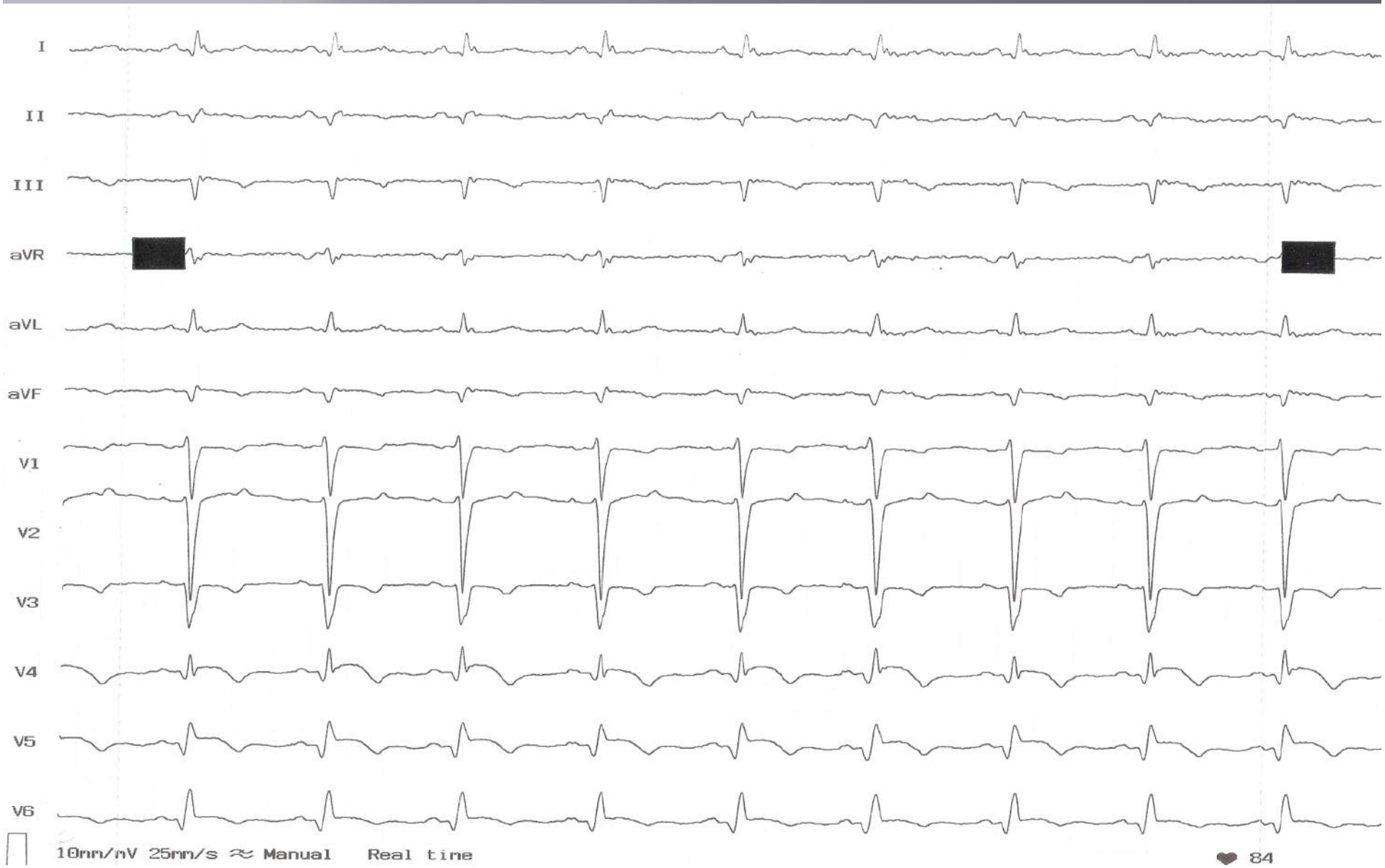
- CVS examination :
  - Inspection :
    - No precordial bulging
    - Apical impulse seen in left 5th ICS
    - No visible pulsations
    - No scars and sinuses
    - No dilated veins over chestwall

- Palpation :
  - Apical impulse in left 5th ICS
  - No thrills palpable
  - No parasternal heave

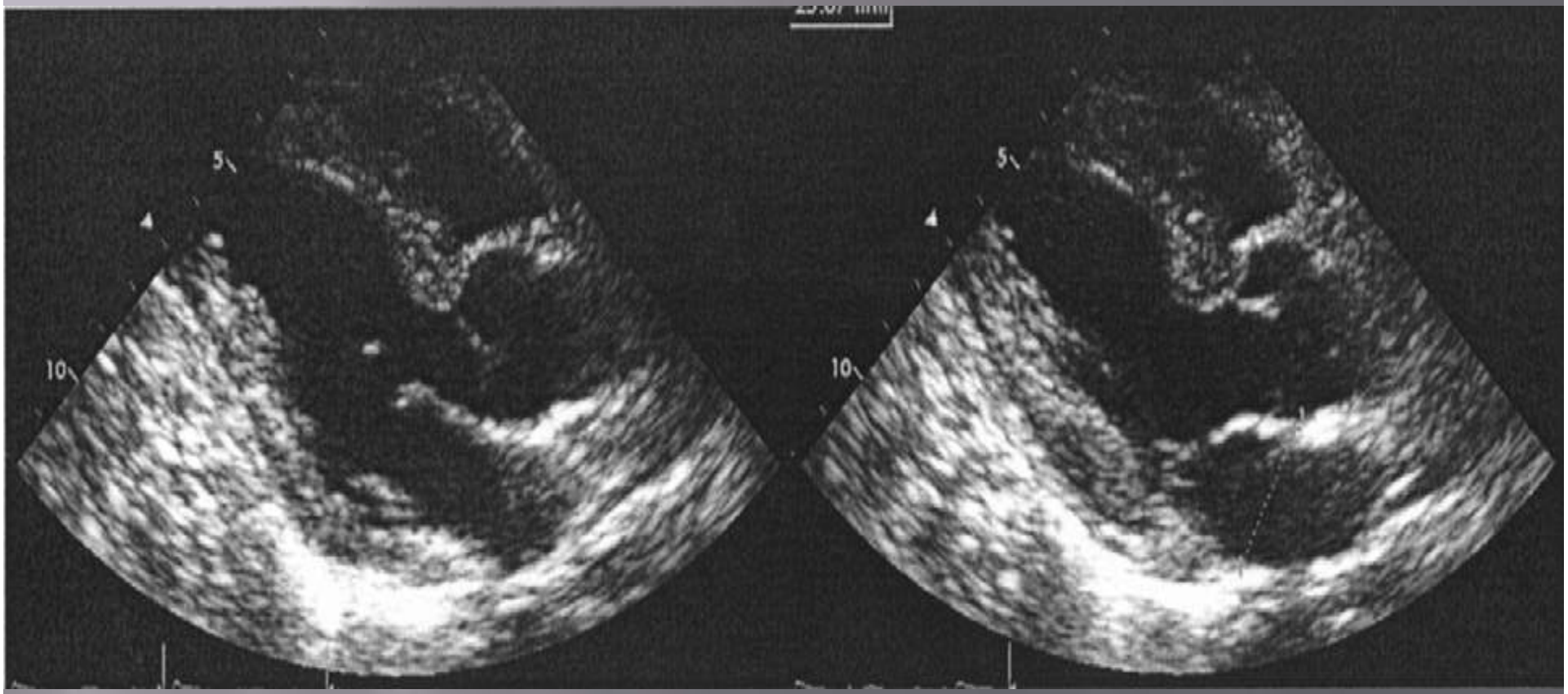
- Auscutation
  - Mitral area : S_1 S_2 present.
  - Tricuspid area : S_1 S_2 present
  - Aortic area : S_1 S_2 present
  - Pulmonary area : S_1 S_2 present

- RS - b/l air entry heard, no additional sounds heard
- P/A- Soft
  no organomegaly.
- CNS- no focal neurological deficit

ECG


I
II
III
aVR
aVL
aVF
V1
V2
V3
V4
V5
V6
10mm/mV 25mm/s Manual Real time
84

2D-ECHO



2D echo-In a parasternal long-axis view, the apical portion of the left ventricle is dilated and dyskinetic, with basal portion contraction preserved

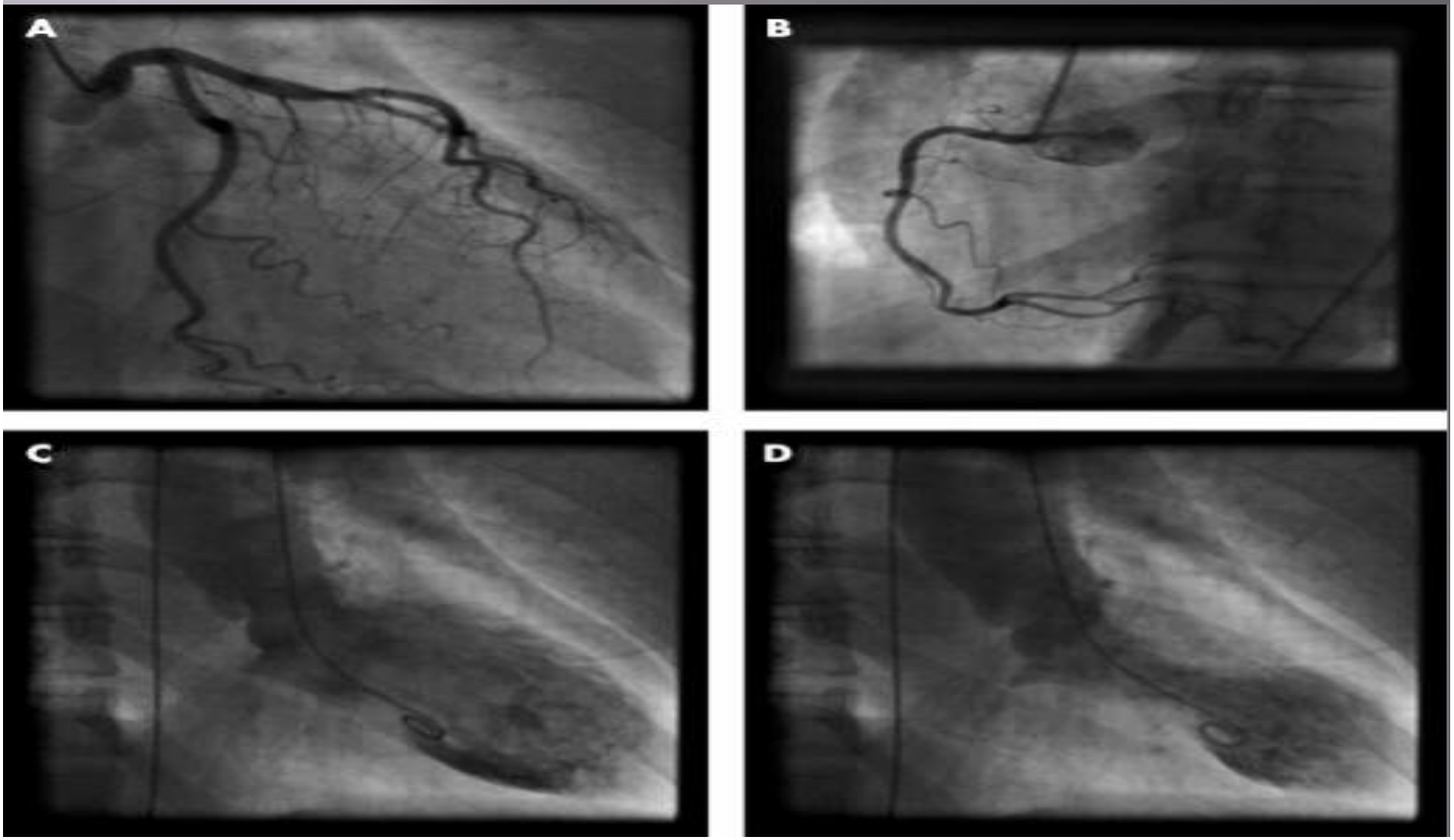
- 2D ECHO
  - EF-35%
  - normal thickness with enlarged left ventricular apex
  - RWMA-present

INVESTIGATIONS

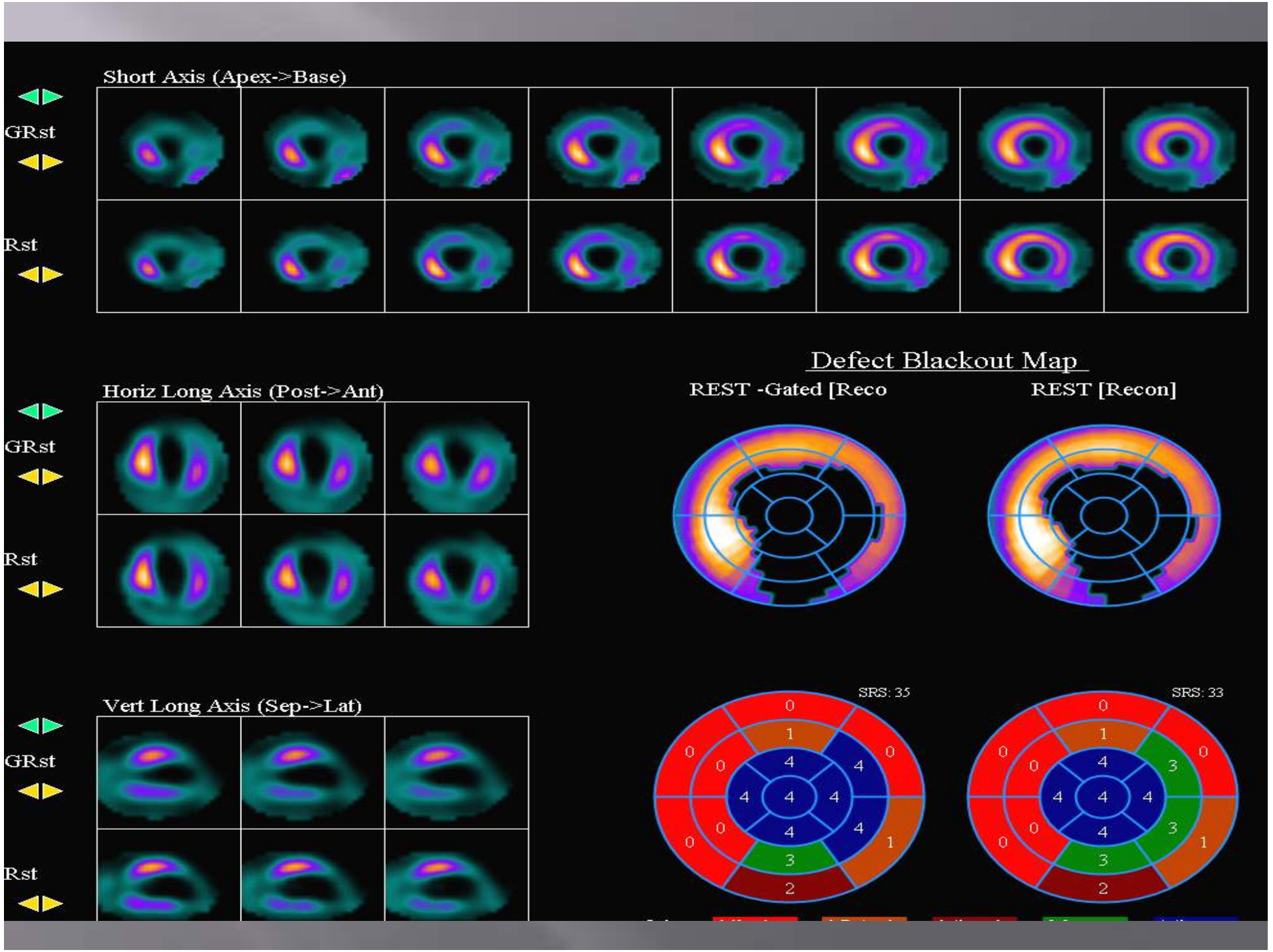
- CBP-HB :11.2g/dl
  TC :11,OOO/cumm
  PLT CT :2.7LAKHS/cumm
- BU :33mg/dl
- SC :0.9mg/dl
- RBS :122mg/dl
- Na :140meq/l
- K :3.5meq/L
- Cl :105meq/l
- CUE :albumin +, PUS CELLS : 1-2/HPF

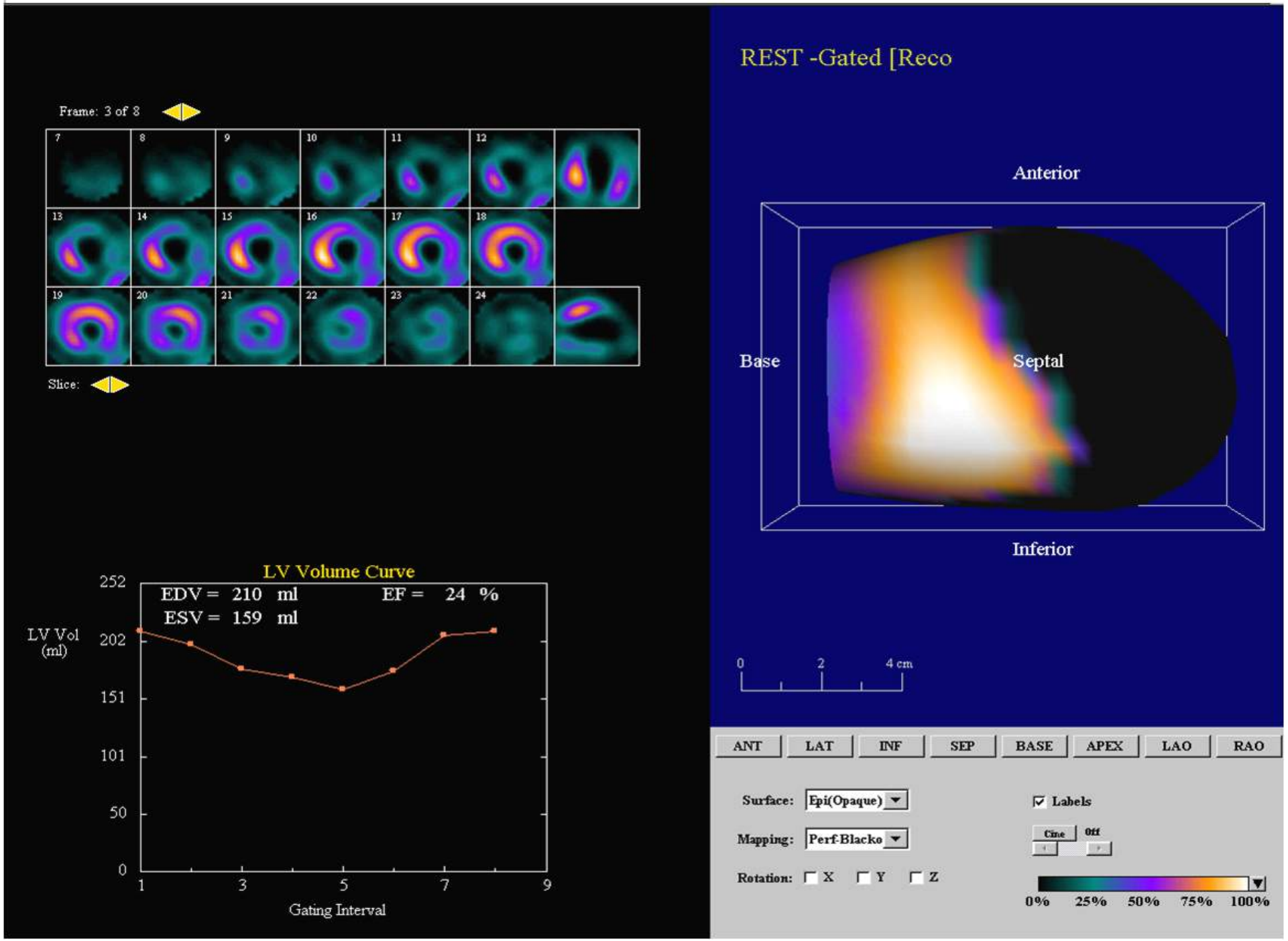
- CXR - Normal
- CARDIAC ENZYMES : CK-MB : slightly elevated, Troponin I : positive

- Patient was referred to higher centre for angiogram



- As the macrocirculation is normal, to detect microcirculation abnormalities, Tc 99m scan was done.


Short Axis (Apex->Base)
GRst
Rst
Horiz Long Axis (Post->Ant)
GRst
Rst
Vert Long Axis (Sep->Lat)
GRst
Rst
Defect Blackout Map
REST -Gated [Reco
REST [Recon]
SRS: 35
SRS: 33


Frame: 3 of 8
7
8
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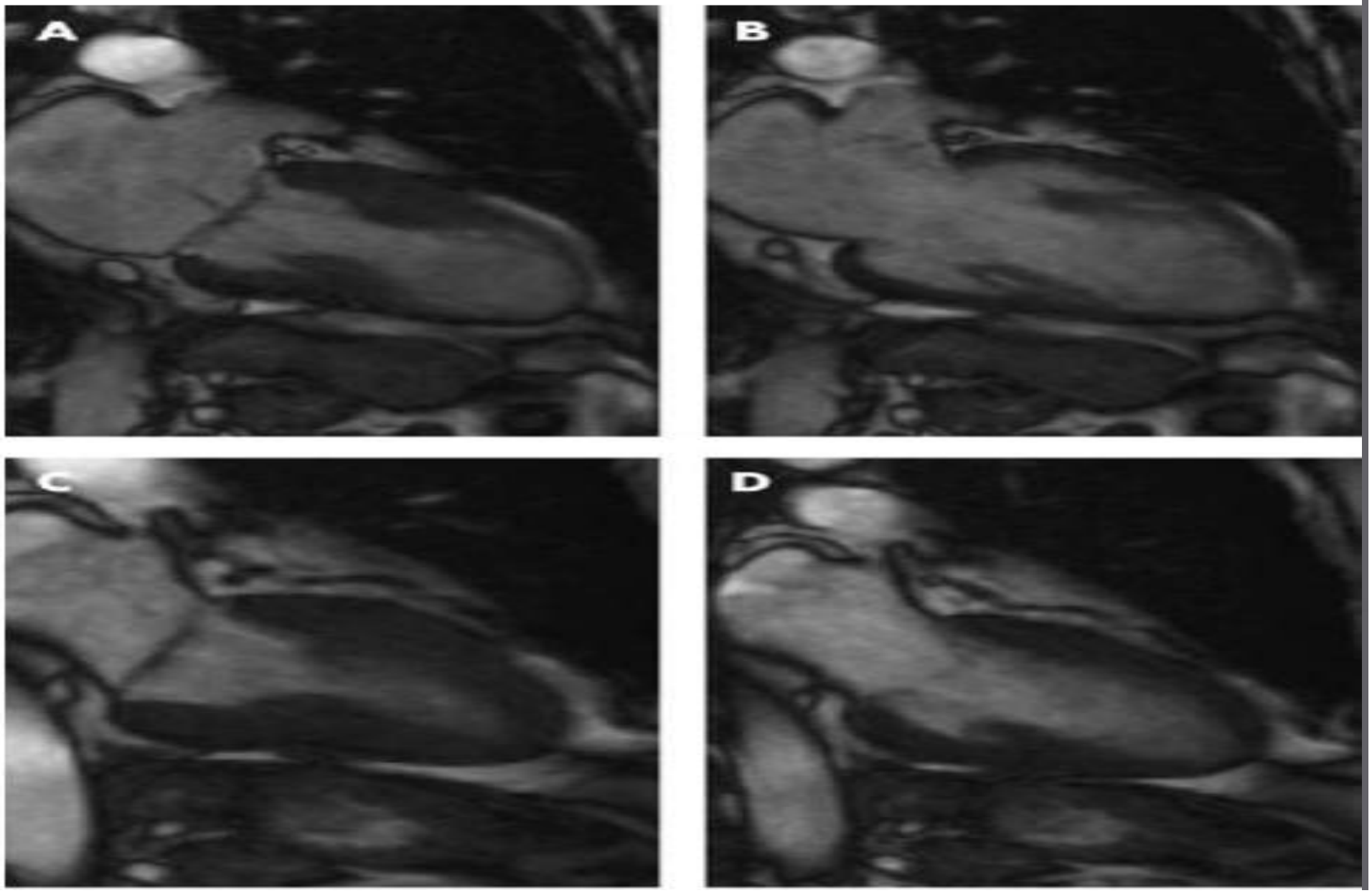
17
18
19
20
21
22
23
24
Slice:
LV Volume Curve
EDV = 210 ml
ESV = 159 ml
EF = 24 %
LV Vol (ml)
252
202
151
101
50
0
1
3
5
7
9
Gating Interval
REST -Gated [Reco
Anterior
Base
Septal
Inferior
0
2
4 cm
ANT
LAT
INF
SEP
BASE
APEX
LAO
RAO
Surface:
Epi(Opaque)
Labels
Mapping:
Perf-Blacko
Cine
Off
Rotation:
X
Y
Z
0%
25%
50%
75%
100%

CMR



CMR Impression

- Cine sequences of CMR imaging during systole (A) and diastole (B) in the acute phase.

- Normal function could be documented after 3 weeks (C, systole; D, diastole)

DIAGNOSIS

- TAKOTSUBO CARDIOMYOPATHY

TREATMENT

- Tab. Ramipril 5mg OD for 3 weeks
- Tab. Furosemide 40mg BD for 3 weeks

- Pt was reviewed after 3weeks with CMR which showed considerable decrease in size of LV ,ECG –ST elevations returned to normal.

CASE 2

- A 27 year old female with 12 weeks of amenorrhea came to medical OPD with C/O :
  - Chest pain since 1 day
  - Shortness of breath since 1 day

HOPI

- Patient was apparently alright 1 day back then she suddenly developed
- Chest pain
  - left sided, acute onset
  - heaviness of chest present
  - radiating to left shoulder and leftarm
  - increased on exertion
  - Not a/w palpitations

HOPI

- Shortness of breath since 1 day
  - Acute onset , increased on exertion
  - Grade I (NYHA)
  - No h/o PND

- No h/o decreased urinary output, pain in right upper quadrant and swelling of lower limbs.

- Past history:
  - not a known DM, HTN, CAD, BA, epilepsy.
  - No h/o RHD

- Personal history:
  - Takes mixed diet
  - Appetite normal
  - Bowel and bladder habits-regular
  - Sleep adequate
  - No addictions

- Family history:
  - h/o sudden death of father 10 yrs back
- Treatment history:
  - No h/o usage of any drugs

General examination

- Pt is moderately built and nourished
- Pt conscious and coherent
- Pallor +, no icterus, cyanosis, clubbing, pedal edema, generalized lymphadenopathy, koilonychia
- JVP : Not raised
- Temp : afebrile
- PR : 100bpm,regular,jerky pulse ,no radio-radial delay, no radio-femoral delay, all peripheral pulses are felt.
- BP :11O/70 in left arm supine position

- CVS examination :
  - Inspection :
    - No precordial bulging
    - Apical impulse seen in left 5th ICS
    - No visible pulsations
    - No scars and sinuses
    - No dilated veins over chestwall

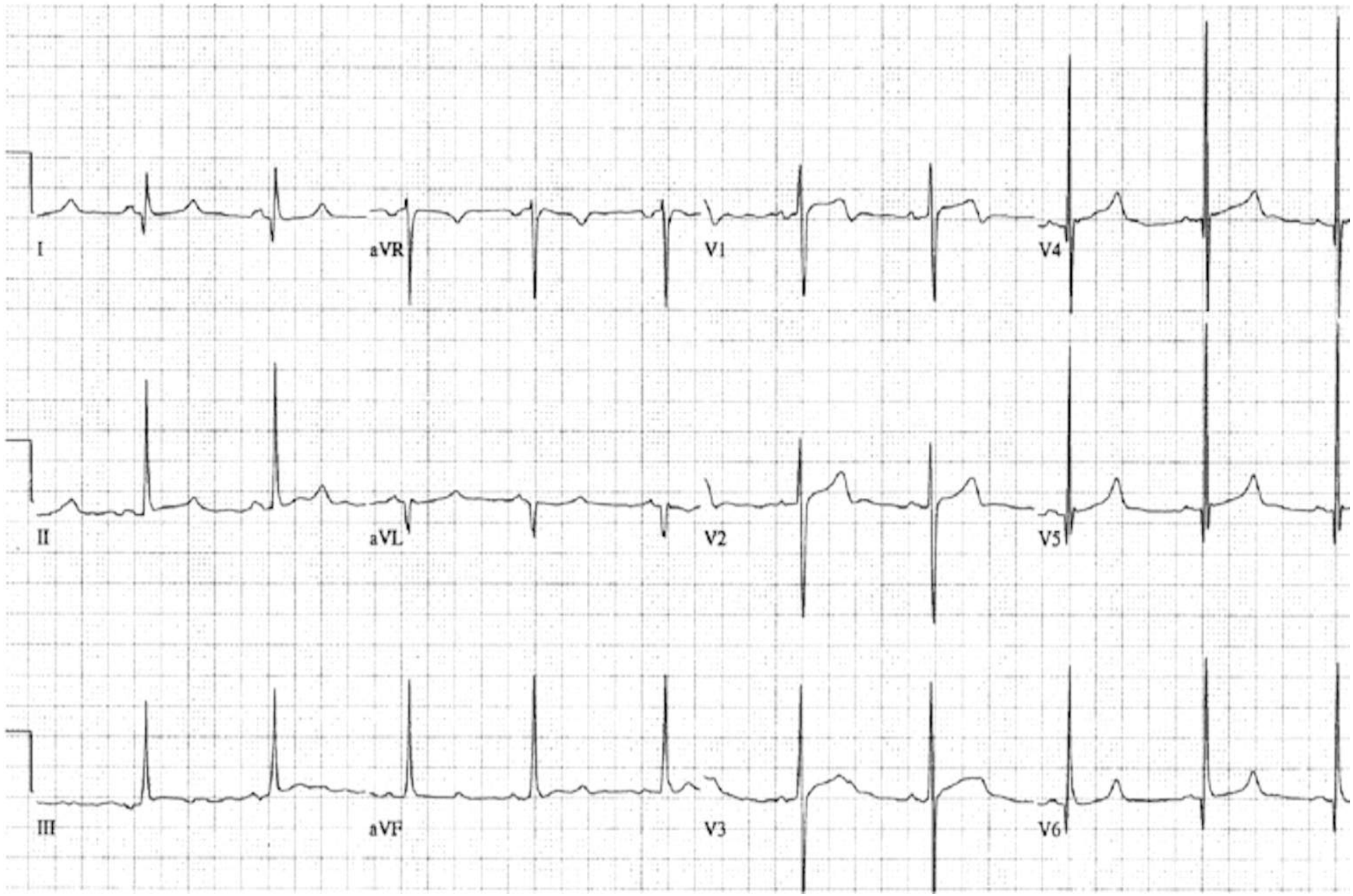
- Palpation :
  - double apical impulse in left 5th ICS lateral to mid-clavicular line
  - No thrills palpable
  - No parasternal heave

- Auscultation
  - Mitral area : S1 soft, S2 present.
  - Tricuspid area : S1, S2 present
  - Aortic area : S1 ,S2 present
  - Pulmonary area : S1 ,S2 present

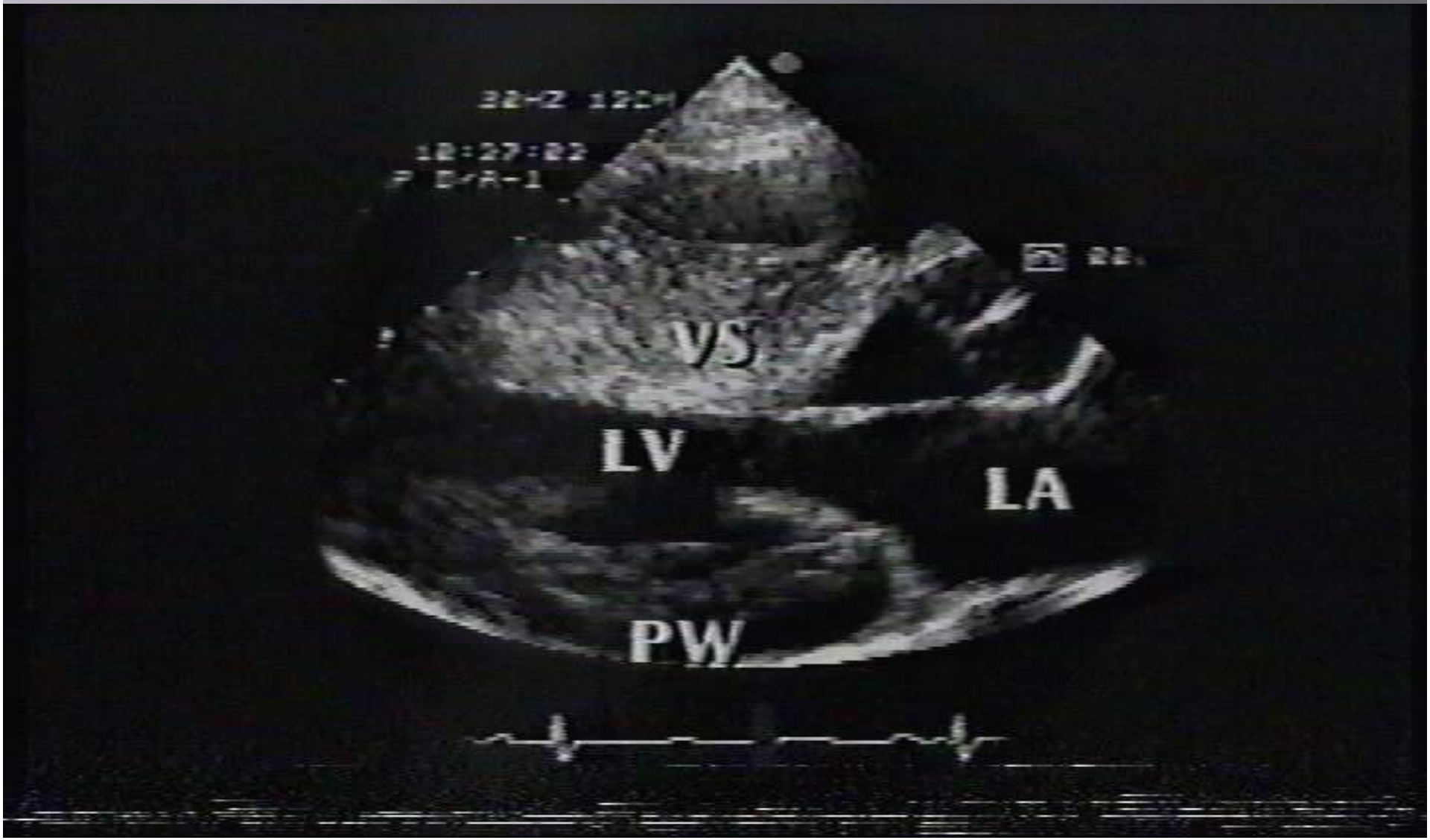
MURMUR

- Ejection systolic Murmur:
  - Between apex and left sternal border
  - Medium pitched Crescendo - Decrescendo
  - Radiated to suprasternal notch
  - Not radiating to carotids
  - Best heard in expiration
  - Best heard in leaning forwards
- Dynamic auscultation: murmur intensity increased on valsalva and standing from squatting position ,decreased on sustained hand grip.

ECG



2 D Echo



- 2D – ECHO with Doppler
  - MR (MILD)
  - Flow velocity: > 4.0 m/s
  - LV outflow gradient: > 50 mm Hg
  - EF : 55%
  - Small LV cavity <45mm
  - Left atrial enlargement
  - Septal thickness: 18mm
  - SAM of Mitral valve
  - Asymmetric septal hypertrophy

INVESTIGATIONS

- CBP
  - HB :8.2g/dl
  - TLC :11,OOO/cumm
  - PLT CT :2.7LAKHS/cumm
- BU :40mg/dl
- SC :0.8mg/dl
- RBS :132mg/dl
- Na^+ :136meq/l
- K^+ :4.1meq/L
- Cl^- :105meq/l
- CUE :ALBUMIN+, PUS CELLS : 1-2/HPF
- Cardiac Enzymes : CK-MB and Troponin I -- negative

DIAGNOSIS

- HYPERTROPHIC CARDIOMYOPATHY

TREATMENT

- 1 pint packed cell transfusion done
- Serial 2D ECHO monitoring done every 3rd week

CASE 3

A 38 year old female patient presented with

- chest discomfort since 4 months
- swelling of both lower limbs since 3 months
- shortness of breath since 3 months

Patient presented with

- chest pain since 4 month,
  - On and off , sub sternal region, sudden onset
  - Aggravated on exertion and relieved on taking rest,
  - Stabbing type of pain,
  - Radiating to left shoulder, lasting for 10 min, 2-3 episode per month.

- Bilateral lower limb swelling since 3 months, initially in the foot gradually progressed above

- Breathlessness since 3 months,
  - gradually progressed from grade I to grade III
  - not associated with cough or sputum
  - no h/o orthopnoea or PND or wheeze.

- h/o palpitations present
- c/o abdominal discomfort
- No h/o decreased urine output

- Past history
  - No similar history in the past
  - Not a k/c/o HTN,DM,TB,asthma
  - No h/o previous hospitalizations
- Family history
  - nothing signifcant
- Drug history
  - no h/o usage of any drugs

- GENERAL PHYSICAL EXAMINATION:
  - Young female moderately built and nourished, conscious and oriented.
  - Bilateral pitting pedal edema till knee-present
  - No Pallor, Icterus, Cyanosis, Clubbing , Lymphadenopathy

- Vitals
  - PR -100bpm,irregularly irregular,low volume,apex pulse defecit-12,no radio-radial or radio-femoral delay.
  - BP -100/70mm of hg,right arm supine position
  - Temp -afebrile
  - RR -19cpm,abdominothoracic.
  - JVP -raised,10cm of H2O,absent a wave

- Cardiovascular examination
  - Inspection
    - No precordial bulging
    - Apical impulse seen in left 5th ICS
    - No visible pulsations
    - No scars and sinuses
    - No dilated veins over chestwall
  - Palpation
    - apex beat felt in 5th ICS, 1/2 inch medial to mid clavicular line.
    - no thrill palpable.

- Auscultation
  - Mitral Area – S1 soft, pansystolic murmur heard
  - Tricuspid Area- pansystolic murmur heard
  - Pulmonary Area- P2 loud .
  - Aortic Area - S1, S2 heard

- RS- b/l air entry heard, no additional sounds heard
- P/A- mild distension-present
  abdomino-jugular reflex-present
  no organomegaly.
- CNS- no focal neurological defecit

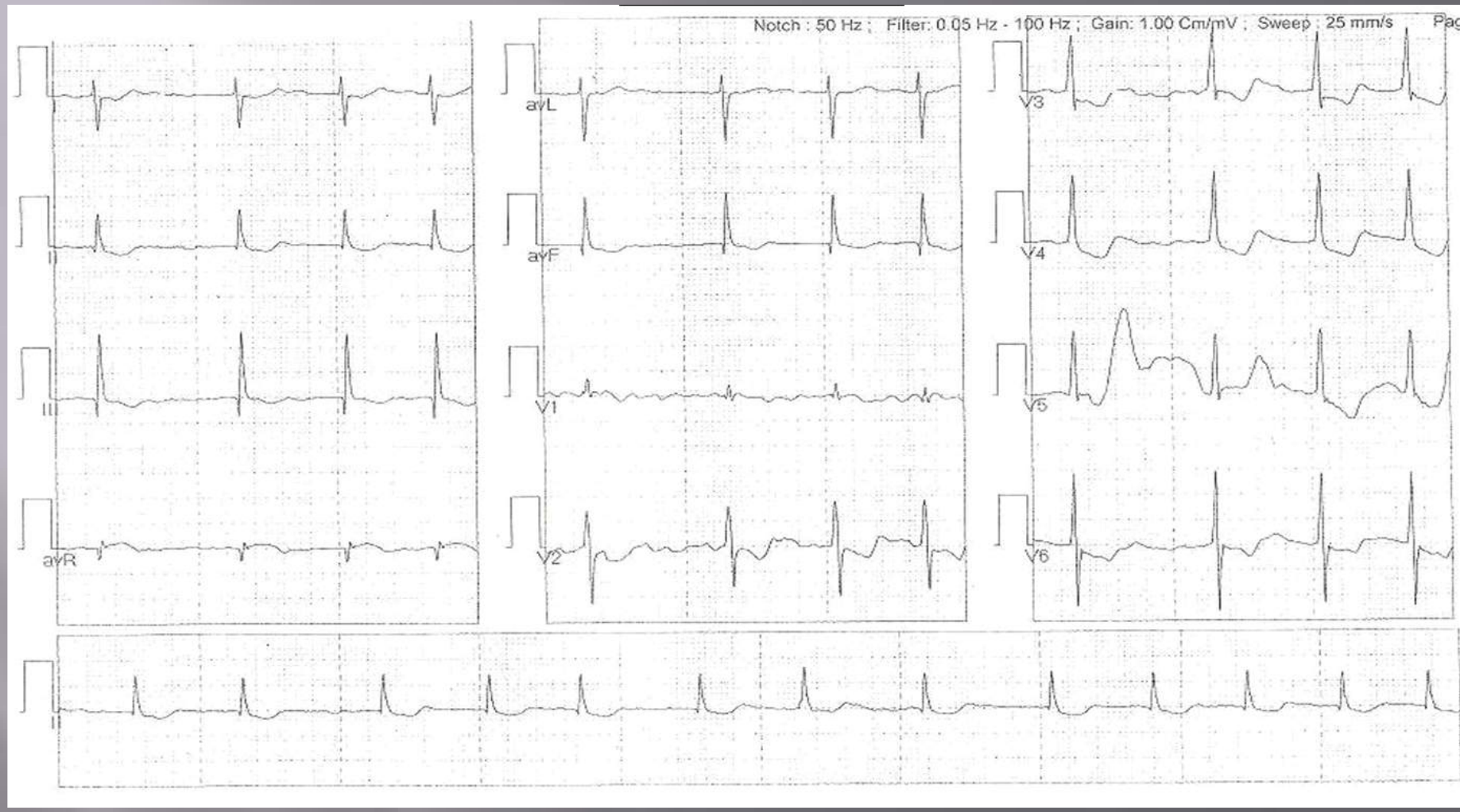
DIAGNOSIS

- Restrictive cardiomyopathy

INVESTIGATIONS

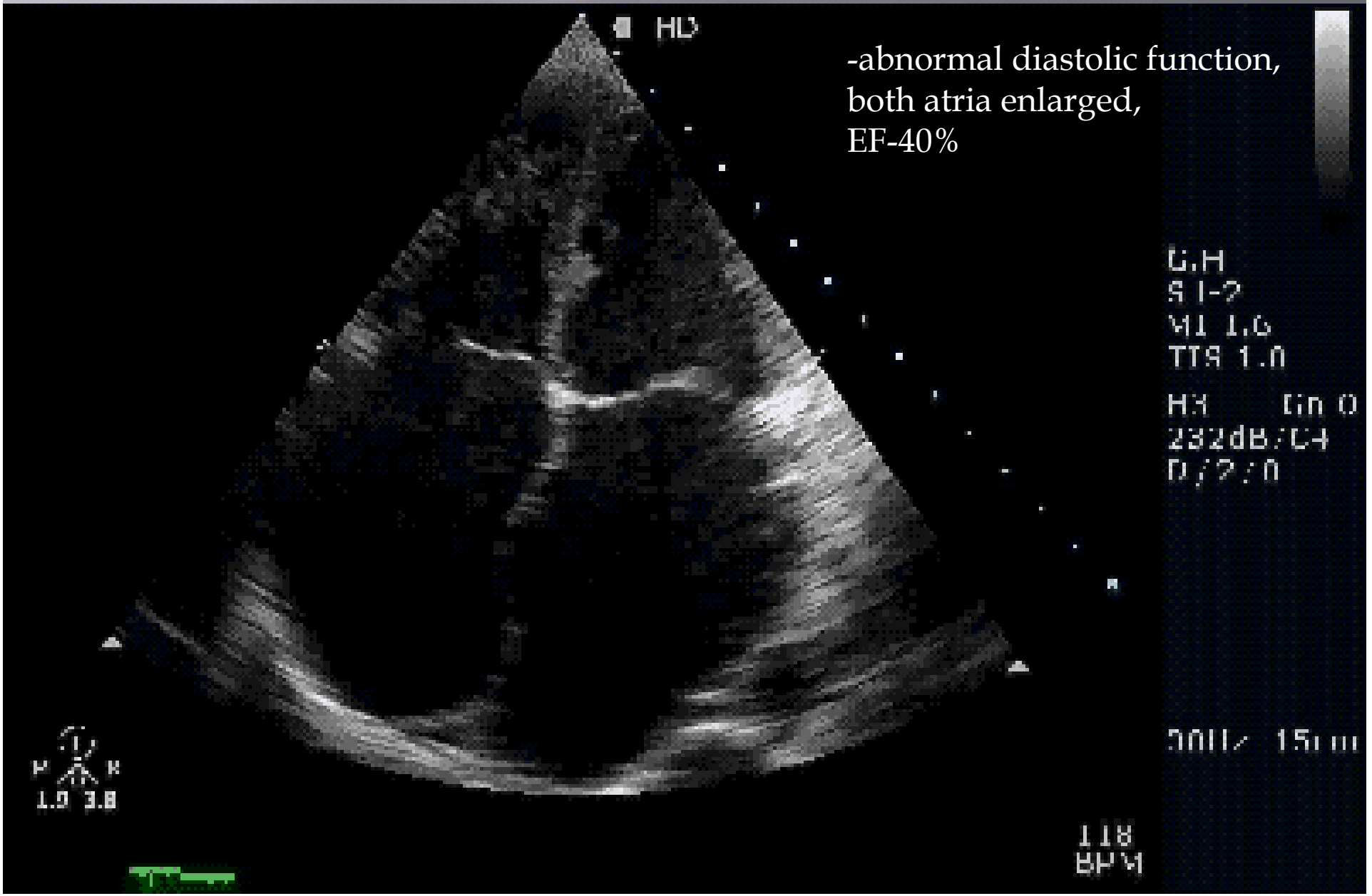
- CBP-HB :9.2g/dl
  TLC :11,OOO/cumm
  PLT CT :2.7LAKHS/cumm
- BU :42mg/dl
- SC :1.0mg/dl
- RBS :122mg/dl
- Na^+ :141meq/l
- K^+ :3.7meq/L
- Cl^- :111meq/l
- CUE :PUS CELLS:1-2/HPF

ECG



ECG showing varying RR interval with absent p waves , RAD,low voltage complexes

2D-ECHO



DIAGNOSIS

- Restrictive cadiomyopathy

Treatment

- Tab. Warfarin 2mg od
- Tab. Metoprolol 12.5mg od
- Tab. Digoxin 0.25 mg od
- Tab. Furosemide 40mg od

- Pt was reviewed every 15 days, considerable improvement in symptoms was seen .

THANK YOU